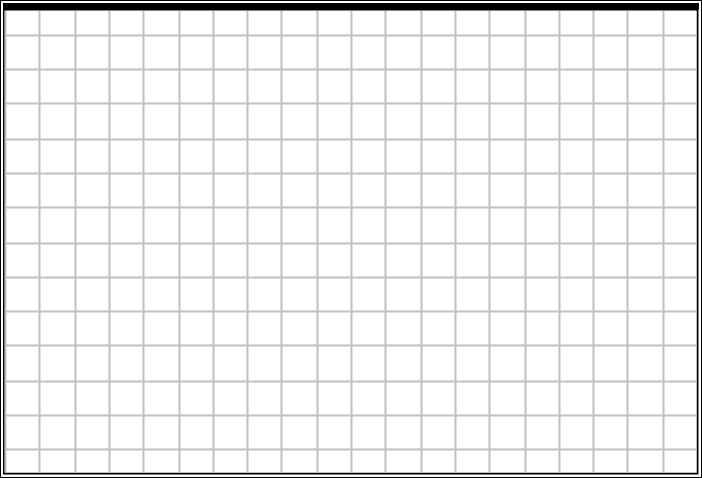
Unit 2 Day 5B Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per \_\_\_\_

Using your graphing utility and graph the following functions. Sketch a complete graph and label the graph to indicate the window settings. Identify the information listed.

****1. **f(x) =x5+ 3x3+2x2-12x+8**

Relative max(s):\_\_\_\_\_\_\_\_\_\_\_\_\_ Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_

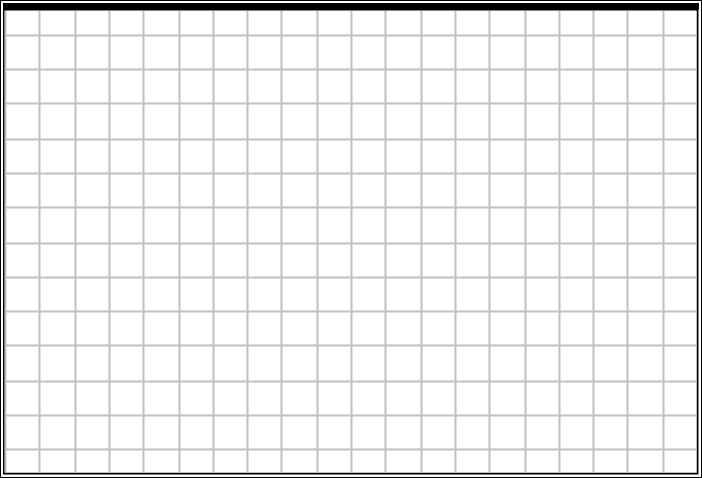
Relative min(s):\_\_\_\_\_\_\_\_\_\_\_\_\_ Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Absolute max:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Increasing: \_\_\_\_\_\_\_\_\_\_\_

Absolute min:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Decreasing:\_\_\_\_\_\_\_\_\_\_\_

zeros: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y-int: \_\_\_\_\_\_\_\_\_\_

2. **f(x) =x4+ 6x3+10x2+6x+9**

****

Relative max(s):\_\_\_\_\_\_\_\_\_\_\_\_\_ Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_

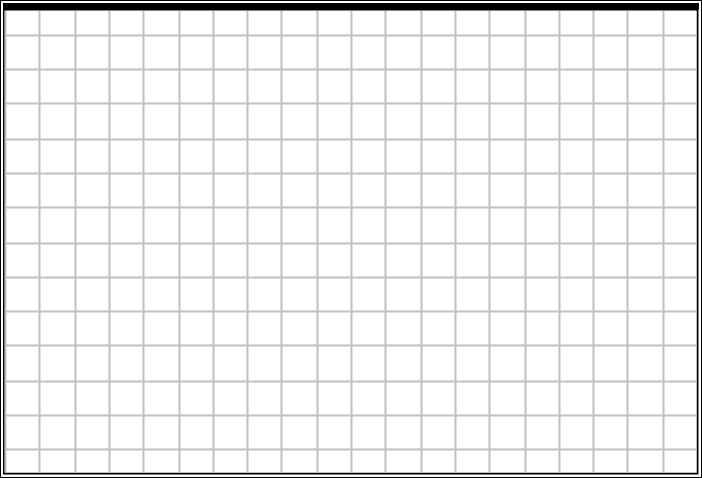
Relative min(s):\_\_\_\_\_\_\_\_\_\_\_\_\_ Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Absolute max:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Increasing: \_\_\_\_\_\_\_\_\_\_\_

Absolute min:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Decreasing:\_\_\_\_\_\_\_\_\_\_\_

zeros: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y-int: \_\_\_\_\_\_\_\_\_\_

3. **f(x) =25x3-55x2-54x-18**

****

Relative max(s):\_\_\_\_\_\_\_\_\_\_\_\_\_ Domain:\_\_\_\_\_\_\_\_\_\_\_\_\_

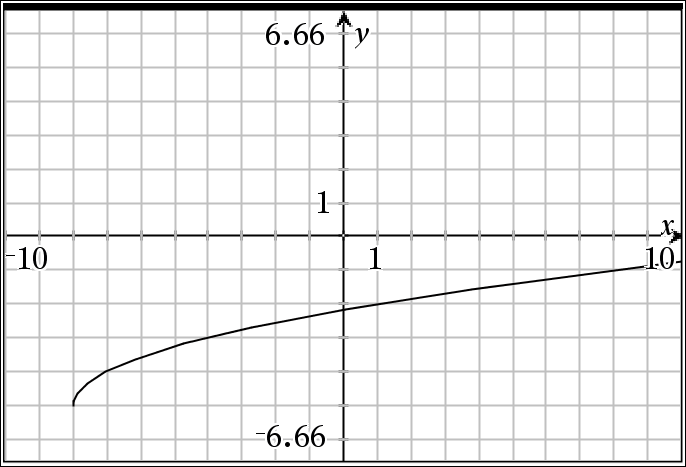
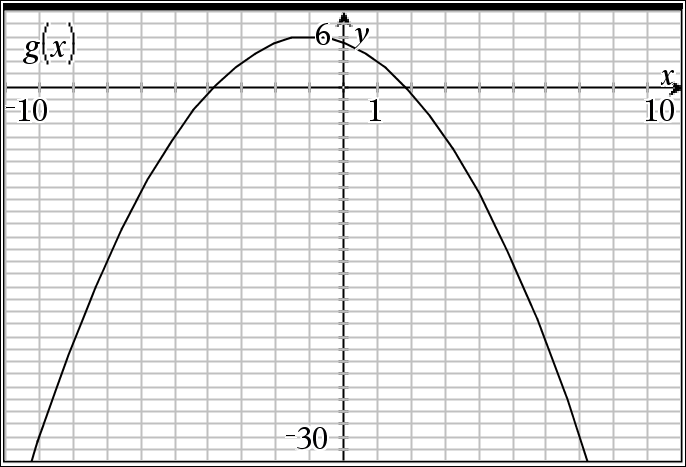
Relative min(s):\_\_\_\_\_\_\_\_\_\_\_\_\_ Range:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Absolute max:\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Increasing: \_\_\_\_\_\_\_\_\_\_\_

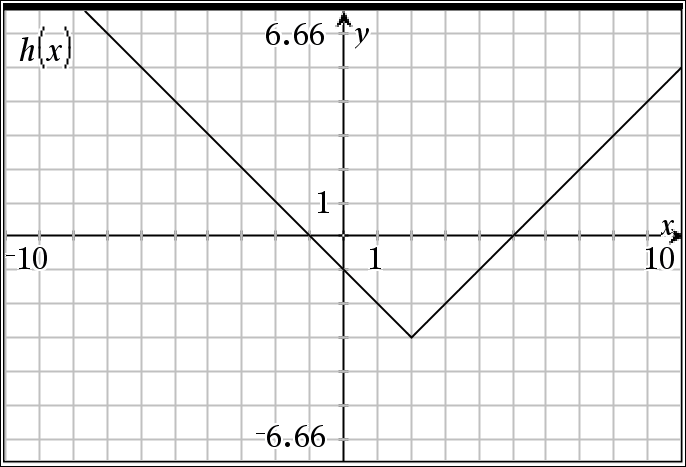
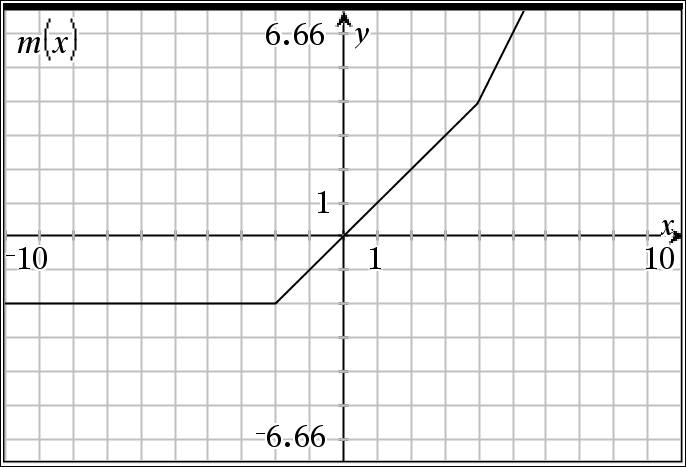
Absolute min:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Decreasing:\_\_\_\_\_\_\_\_\_\_\_

zeros: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ y-int: \_\_\_\_\_\_\_\_\_\_

Use the graphs to find the following problems.



*f*(x)



\*4. m(g(3)) \*5. h(-4)+f(-4) \*6. (m/f)(-4) \*7. (gh)(-5)

\*8. g(1) – f(1) \*9. h(-7) + m(-7) \*10. h(m(3)) \*11. h(f(-7))